

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8 999 18<sup>TH</sup> STREET - SUITE 300

DENVER, CO 80202-2466 http://www.epa.gov/region08

MAR 17 2004



Ref: 8P-W-GW

## <u>CERTIFIED MAIL</u> RETURN RECEIPT REOUESTED

Mr. Howard Snyder 1240 Harlan LLC 771 Santa Fe Drive, Suite 204 Denver, Colorado 80204

Re:

UNDERGROUND INJECTION CONTROL (UIC)

Class V Injection Well Rule Authorization

Former AAD Disposal Site

1240 Harlan Street Lakewood, Colorado

EPA File # CO50000-04649

Dear Mr. Snyder:

The Environmental Protection Agency (EPA) has reviewed the proposal dated February 23, 2004 submitted by ERO Resources Corporation on behalf of 1240 Harlan LLC for the injection of treated ground water purged from monitoring wells during sample collection at the Former AAD Disposal Site located at 1240 Harlan Street in Lakewood, Colorado. We have decided, pursuant to Title 40 Code of Federal Regulations (40 CFR), §144.24 (as modified in part January 3, 1994), that a permit is not necessary at this time for injection at this site. However, this injection activity is subject to the Rule Authorization requirements outlined in 40 CFR, including, but not limited to, §144.12, §144.24, and §144.27 (as modified in part January 3, 1994). This Rule Authorization is for the 1240 Harlan Street Site in Lakewood, Colorado, is based on information in the proposal dated February 23, 2004 and is valid for:

The injection of treated purge water from monitoring wells as described in the cited proposal.

Based on our understanding the proposed injection activity, we believe this injection process poses minimal potential to adversely impact ground water. For this reason, you may proceed with the injection activity and you will not be required to operate under a UIC program permit at this time.

Any change in operating methods or conditions specified in the proposal dated February 23, 2004 must be approved in advance by the EPA. If you intend to change the proposed injection procedures or injectate, please notify EPA in advance, so that we may modify this Rule Authorization. Please be advised that this Rule Authorization pertains to Underground Injection Control (UIC) solely and does <u>not</u> relieve you from satisfying any other federal, state or local regulations or requirements that may apply.

# Please send all correspondence to:

U. S. Environmental Protection Agency Attention: Valois Shea MAIL CODE: 8P-W-GW 999 18th Street, Suite 300 Denver, CO 80202-2466

If you have any questions concerning this Rule Authorization or for interpretation of Class V regulations, policies, and guidance, please contact Valois Shea at 1-800-227-8917 x6276 or 303-312-6276.

Sincerely,

Sandra A. Stavnes

Director

Ground Water Program

cc:

Mr. Richard Trenholme ERO Resources Corporation 1842 Clarkson Street Denver, CO 80218

Colleen Brisnehan CDPHE, HMWMD-B2 4300 Cherry Creek Drive South Denver, CO 80246



Rule Authorization
Former AAD Disposal
1240 Harlan Street
Lakewood, Colorado 80214
EPA File # CO50000-04649
February 25, 2004

In a letter dated February 23, 2004, ERO Resources Corporation (ERO) requested authorization to inject purged ground water treated with potassium permanganate into a shallow monitoring well at the Former AAD Disposal Site. VOC contamination of ground water and soil at the site resulted from activities that took place on the property from 1998 to 2000 when the property was occupied by AAD Disposal. This remediation project is being conducted under the auspices of the State of Colorado Hazardous Waste Corrective Action Unit.

### **Property Owner**

1240 Harlan LLC 771 Santa Fe Drive, Suite 204 Denver, Colorado 80204 Phone: 303-572-8778

FAX: 303-595-9567 contact: Howard Snyder

# Responsible Party for O&M and Closure of Pilot Injection System

Mr. Richard Trenholme ERO Resources Corporation 1842 Clarkson Street Denver, CO 80218

Contact: Joby Adams, Principal/Hydrogeologist

Phone: 303-830-1188 FAX: 303-830-1199

### **CDPHE Contact Person**

Colleen Brisnehan CDPHE, HMWMD-B2 4300 Cherry Creek Drive South Denver, CO 80246

Phone: 303-692-3357

FAX: 303-

#### Background

As part of the remediation activities at the site, ERO is required by CDPHE to sample wells semi-annually. Each well must be purged prior to sample collection. Approximately 55 gallons of purged contaminated ground water will be produced during each sampling event. ERO has

received approval from CDPHE to treat the purged water on-site using potassium permanganate, then dispose of the waste as non-hazardous waste. Before it is injected, the extracted ground water will be sampled and tested after treatment to verify that all contamination has been removed. ERO proposes to inject the treated ground water by gravity into existing monitoring well MW-2 shown in Figure 2.

Sampling results were provided for MW-3, MW-6, and MW-7, the only wells currently being sampled as part of the on-going monitoring plan. A synopsis of sampling results for contaminants of concern is shown in Table 1. Since these wells are within the contaminant plume, the ground water purged from these wells is considered hazardous waste. Once the purged water is treated with potassium permanganate, the concentration of contaminants will be below MCLs. CDPHE has stated in a letter that once sampling and analysis of the treated water confirms that contaminants are below State ground water standards, the water can be disposed of as non-hazardous waste, either offsite or by re-injection into the ground water at the site.

Analyte	MW-3 μg/l	MW-6 μg/l	MW-7 μg/l	MCL μg/l	Analysis of purged ground water after treatment µg/l
1,1,1-Tricholorethane	606	U	U	200	ND
1,1,2-Tricholorethane	2.7J	U	U	5	ND
1,1-Dicholorethane	35	U	0.80J	none	3.6
1,1-Dicholorethene	130	0.41J	1.4	7	ND
1,2-Dicholorethane		U	U	5	1.0Ј
Benzene	2.8	U	U	5	ND
cis-1,2-Dicholorethene	7.2	1.9J	4.8	70	ND
methylene chloride (dichloromethane)	0.46J	U	U	5	0.54 J, B
Tetrachloroethene	803	31	27	5	ND
trans-1,2-Dichloroethene	U	1.J	1.0J	100	ND
Trichloroethene	0.89J	3.7	5.3	5	ND
Vinyl Chloride	28	U	U	2	ND

U = compound analyzed for but not detected.

J = Indicates an estimated value when the compound is detected, but is below the Lower Quantitation Limit.

**ND** = not detected above the Reporting Limit for the analytical method used.

**B** = Analyte detected in Method Blank, value not subtracted from result.

### **Hydrogeologic Information**

Monitoring well MW-2 is completed to a depth of 27 feet below ground surface and is screened from 17 to 27 feet. The lithology on the property consists of sandy to silty clay alluvium.

## **Injection Activities**

The injection activity at the site will consist of a injection of water extracted from the 3 monitiring monitoring wells by purging each well before sample collection. The purge water from the contaminant plume is considered hazardous waste until it is treated and verified by sampling and analysis to be below the State ground water standards. CDPHE requires that the treated ground water be sampled each time to verify that it is below the State ground water standards before it can be injected. After a period of demonstrating that the treatment is fully effective, eventually the treated purge water can be injected without confirmation sampling.

#### Recommendation

Disposal of treated ground water purged from monitoring wells during sampling events will be analyzed to verify that the contaminants have been treated to below the State ground water standards before it is injected. Analysis will occur until CDPHE has determined the treatment process has been demonstrated to be fully effective. The State ground water standards are the same as MCLs for the constituents of concern. Therefore, injection of this water should not endanger ground water in the area.

